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Crowdfunding in Europe

The Impact of National Crowdfunding Regulation

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Abstract

Crowdfunding is a new way of funding projects, which has developed the past few years. The rapid growth has resulted in an unregulated industry due to a lagging legal framework. As a result, some European countries have implemented a national crowdfunding regulation. This study tries to examine the effect crowdfunding regulation has had on the development of new crowdfunding platforms by assessing the differences in growth rates before and after the regulation. Examining seven out of 11 countries in Europe who has enforced crowdfunding regulation, only two countries experienced a constant or an increase after the crowdfunding regulation. However, by including the perception the crowdfunding industry had on the regulation, no pattern seems to be conducted between the perception of the regulation and the actual growth of new platforms.

Keywords: *Crowdfunding, Regulation, Europe, New Platforms*

Introduction

An increasingly important financial sector is emerging around the world, namely online alternative finance. In Europe, this sector has had a continuous growth from 2013, but it is still lagging compared to other major economies such as Asia-Pacific and the Americas (Ziegler et al., 2018). The taxonomy explaining online alternative finance is still a work in progress, but in the report “Expanding Horizons” (Ziegler et al., 2018) all types of crowdfunding models, from donation-based crowdfunding to invoice trading, makes up the European online alternative finance sector. Crowdfunding platforms offer funding to consumers and businesses as an alternative to the traditional banking sector. We find the biggest market in the UK, but the rest of Europe is tagging along, which has contributed to the tremendous growth in the most recent years (Ziegler et al., 2018). As crowdfunding is expanding fast all over Europe, it has become a vital source of funding for small and medium-sized enterprises (SMEs), who provides new jobs and secure future economic growth (European Commission, 2016). The European Commission acknowledges this as in their action plan towards building a single Capital Market Union (CMU), pursue to strengthen different sources of finance, including crowdfunding (European Commission, 2016).

As a consequence of the rapid growth in a short amount of time, the legal framework has not been able to keep track of the changes. This issue has left the industry unregulated forcing each country to interpret the already existing legal framework and make it applicable to this new activity. The question regarding how to regulate crowdfunding or even if it should be regulated at all has gotten more attention as the industry has grown. However, the European Commission has been passive concerning regulating crowdfunding for several years, waiting with harmonising regulation across Europe to allow the industry to mature first (Ziegler et al., 2018). Thus, several European countries have implemented a national crowdfunding regulation with

the objective of facilitating the development of crowdfunding (European Commission, 2016). This forms the background for this study. The purpose of this work is to provide insight into crowdfunding regulation and how the regulation has impacted the development of the industry by looking at the number of new platforms established. By examining the growth of new platforms and the perception of crowdfunding regulation, it is possible to indicate whether the regulation is a barrier for new platform creation or if it is an opportunity for growth. With this in mind, the research question is: *How does regulation impact the establishment of new crowdfunding platforms?*

The rest of the paper is organised as follows. The next paragraph introduces what crowdfunding is before it reviews existing literature on financial regulation. Consequently, the methodology is presented followed by a section providing the results. Lastly, there will be a concluding remark of the findings.

Literature review

This chapter is divided into two parts. The first part explains what crowdfunding is and introduces how it is regulated, while the second part reviews existing literature on the topic of financial regulation.

What is Crowdfunding and how is it Regulated in Europe

Crowdfunding is an alternative method to gather finance, offered to both consumers and businesses. According to the European Commission (2016) “Crowdfunding refers to an open call to the public to raise funds for a specific project”. Three parts are participating in crowdfunding, where the crowdfunding platform is the website interacting between the fundraiser and the crowd of investors (European Commission, 2016). Several types of crowdfunding exist, and we can broadly distinguish between financial and non-financial

crowdfunding models. The following categories are laid out by the European Commission (2016) where the first three models presented are financial models, and the next two are non-financial. *Investment-based crowdfunding* (also referred to as equity-based) contains equity or debt instruments issued by companies to the crowd of investors. *Lending-based crowdfunding* (also referred to as peer-to-peer or marketplace lending) consists of companies or individuals looking for funding in the form of a loan. *Invoice trading crowdfunding* is a form of asset-based financing where companies sell unpaid invoices or receivables. In *Reward-based crowdfunding*, individuals donate money to a campaign with the promise of receiving a reward in the form of a good or service in return if the campaign is successful, whereas in *donation-based crowdfunding* the individual donating money does not receive anything in return. Lastly, *hybrid models of crowdfunding* combine components from the crowdfunding models already described.

As of today, there is no harmonised European crowdfunding regulation. This has made it possible for crowdfunding platforms to organise themselves to avoid the most excessive regulation (Ahern, 2018). Countries are today either using national crowdfunding regulation, the EU legislative framework or national laws applicable to crowdfunding (European Commission, 2017). During the last few years, 11 countries in Europe have introduced a national regulation towards crowdfunding, where each regulation differ from country to country. Nevertheless, they all have the same common purpose of enabling the development of crowdfunding while addressing key risks that may arise for investors (European Commission, 2016). Due to crowdfunding being in a large extent a local or regional phenomenon, and the regulators wanting to address the needs of the local market and investors, there is a disparity in the way to reach those objectives across nations (European Commission, 2016). Some of the differences in domestic crowdfunding regulation are whether a platform is authorised under MiFID and benefit from the passport allowing them to operate in other EU countries or

authorised under an exemption of MiFID not allowing them the benefit of the passport. Minimum requirements subject to both investment-based and lending-based crowdfunding varies in great extent and the threshold for publishing a prospectus as well. Other examples are to what extent the Payment Service Directive is applicable or the anti-money laundering and counter-terrorist financing rules (AMLD). A challenge raised as a consequence of no harmonised EU regulation is the difficulty in expanding the crowdfunding platform into other EU countries. A platform wishing to expand its business across nations has to adapt to a new legal framework while still complying to the regulation applicable in its home country. Consequently, this raises the compliance- and operational costs and prevents expansion which, according to the European Commission (2018), is one of the reasons why the European crowdfunding industry is fragmented and lagging behind other leading world economies.

Regulating the Financial Market

The objectives of regulating the financial market are to sustain systemic stability, maintain the safety and soundness of financial institutions and protect consumers (Llewellyn, 1999). These form the reasons why it is necessary to regulate if these objectives are to be reached. Llewellyn (1999) states several economic rationales for financial regulation including systemic problems, market failures, moral hazard, economies of scale and consumer demand for regulation. This section will, however, only focus on one of these rationales, namely market failures.

Regulation is in general justified by the existence of market failures as if there were no imperfections there would be no need for regulation (Llewellyn, 1999). A vital market failure to address is the existence of asymmetric information between a consumer and the supplier of financial services. George Akerlof conducted one of the most well-known theories about asymmetric information in 1970 where he illustrates how asymmetrical information and

adverse selection can create an insufficient market outcome. He uses the market of second-hand cars to point out the asymmetric information that exists between a car seller and the buyer. Due to lack of information available, the buyer cannot distinguish between a good car and a “lemon” (bad car) and is therefore not willing to pay more than the average price of a good car and a lemon. This results in a market with adverse selection where the high-quality car owners do not want to sell their car, leaving the market only with lemons who benefit from selling their car. Several markets are characterised by informational asymmetries, but in the financial market, this is particularly evident. This asymmetry arises from the borrower knowing its collateral and its work better than the investors and use this inside information to seek funding (Brealey, Leland and Pyle 1977). As in the rest of the financial industry, crowdfunding is subject to asymmetric information. This is pointed out by Magnusson (2017), as he declares that crowdfunding platforms benefit from creating and maintaining a position of asymmetric information. A platform earns money on each loan or investment it generates through its platform, creating an incentive to increase the number of loans and investments carried out. As the platform is not carrying any of the risks of default and, as well, being the one interacting between the investors and the borrower, this can cause risky behaviour (Magnusson, 2017).

Correcting for market failures such as asymmetric information is crucial for protecting consumers (Llewellyn, 1999). Regardless, by addressing market failures regulation should not impede competition in the market, but it should enhance it and make it more efficient (Llewellyn, 1999). However, in some cases, regulation can impose unnecessary entry barriers, restrictive practices and other anti-competitive mechanisms (Llewellyn, 1999). Several studies have explored the relationship between higher regulatory barriers and the entrants of new firms in the market, including the study conducted by Djankov, La Porta, Lopez-de-Silanes, and Andrei Shleifer (2002). The study compared high regulated countries to low

regulated countries and concluded that countries with burdensome regulation toward starting a company had fewer businesses being started compared with countries with low regulatory barriers. Another study showing the same connection is Amel and Liang (1997) studying the determinates of entry and profit in local banking markets in the US throughout 1977-88. At this time, several states in the US were subject to a legal barrier to entry in the banking industry in the form of restricting branching laws (*de novo*). This meant chartering a new bank if a bank wanted to enter into a new geographical market instead of opening a new branch. This costly affair worked as a legal barrier and reduced entry, especially in rural bank markets. Van Stel, Storey and Thurik challenged this view in their study conducted in 2007. Examining 39 countries, they did not find a significant impact on the cost, time or number of procedures needed to establish a company on nascent businesses on the reduction of entrepreneurship in a country. Only the minimum requirement seemed to lower the rate of entrepreneurship in a country. Due to this, they conclude that a country cannot reduce these entry barriers and expect entrepreneurship to grow.

Methodology

This study aims to understand how regulation has affected the development of new crowdfunding platforms in the market. To do this, I will compare countries with and without regulation to see if there are any differences between the two. Furthermore, the growth rates before and after implementing the crowdfunding regulation will be assessed together with the perception of the regulation in each country. The perception provides a vital signal on whether the regulation has been a barrier to overcome and what can be expected of future growth after implementing the regulation.

As a first step, I wanted to compare the growth rates between the treated and control group to see if there was any difference between them. However, several problems were detected on the

way of the comparison. First of all, the sample is small, only including ten countries with three countries in the control group. Accordingly, this has made it hard to assume a normal distribution, an essential assumption of running a test. Second of all, the sample is not random. The countries who do have reliable data available are the countries who more eagerly try to develop the crowdfunding industry, and it can be assumed that these countries have a higher growth rate than a random country. Lastly, as the countries in the treated and the control group differ in a great extent in how many platforms exist in the market, comparing growth rates can give a false picture when assessing the differences between the groups. From these drawbacks, a valid conclusion cannot be drawn looking at the differences between the treated and the control group. It can only indicate how the development between the two groups has been.

The next step and the main focus of this study are comparing growth rates before and after regulation for a country. Examining the change in the average growth rate after the regulation compared to before forms the groundwork to understand how regulation has impacted the establishment of new crowdfunding platforms. Growth rates are dependent on the number of platforms existing in the market before, meaning if increasing new platforms by one can result in a growth rate of 100% if there were one before, or it can be by 13% if it was eight before. Therefore, growth rates need to be used with caution when interpreting them. As I only compare the growth rates inside each country, the fluctuation is not as significant as comparing them between countries. By assessing the changes in growth rates before and after regulation, if it has had positive or negative growth and alongside the perception of the regulation, this would illustrate how regulation has affected the new establishment of crowdfunding platforms.

The data sample for this study covers the number of established crowdfunding platforms on a yearly basis in the period from 2012 to 2017 for each country. The only exceptions are Spain,

where no reliable data was found for the year 2012 and Italy where data from 2011 is included to know the growth in 2012. The data includes both national platform and international platforms that operate in at least one of the countries in the sample. Consequently, some crowdfunding platforms can be registered in more than one country in the dataset. The platforms in the sample offer several types of crowdfunding activities such as equity, debentures, invoice trade, donations, bonds, community shares, P2P consumer lending, P2P business lending, real estate, balance sheet business lending, mini-bonds, revenue-sharing, microloan, rewards and hybrids. Keep in mind that this is the number reported launched each year, and several of these platforms are not active today. Accordingly, this does not represent the number of live platforms today in each country. I distinguish between a treated group and a control group, where the treated group consists of the countries who at one point implement a crowdfunding regulation, and the control group contains countries who do not have crowdfunding regulation. The sample contains ten different countries in Europe, whereas all of the countries are EU member states except Switzerland, but Swiss rules are often modelled after EU regulation. As already mentioned, 11 countries in Europe have crowdfunding specific regulation, but the analysis only includes 7 of them, which has all to do with collecting reliable data. The countries included are Spain, Italy, United Kingdom (UK), France, Germany, Austria and Finland. For the countries excluded, Lithuania, Netherland, Portugal and Belgium, the data available was not comprehensive enough to include. Besides, the data that could have been used did not match up compared to other sources, or there were no other sources to compare with. Likewise, the countries chosen to be part of the control group (Denmark, Switzerland and the Czech Republic) is based on reliable data available.

Due to the crowdfunding's young age, there is not much data gathered on crowdfunding, especially in such details needed for the analysis. One of the world's most comprehensive

databases on crowdfunding is TAB. TAB is an independent data resource for crowd finance in the world. They supply market data and analysis and is previously used by the European Commission in one of their studies. This is the primary source of data that I have used for all of the countries. Besides TAB, I have used the following databases to collect the number of platforms. *Crowdfunding 4 Innovation* has an open data section for all of the countries in the sample, *Crowdfunding.de* has registered platforms for Germany, Austria and Switzerland and *Financial Supervisory Authority (FIN-FSA)* has registered platforms in Finland. The other sources used are national crowdfunding reports which are listed below the two graphs. These additional sources were both verifying and adding new platforms not listed in TAB. For some of the platforms, the launch year was not indicated. The platforms that it was not possible to find this information were excluded from the sample. Bear in mind there might be more or less new established crowdfunding platforms than what it was possible to collect for the analysis. Another problem with the alternative finance industry is the fact that there is no universally accepted taxonomy to describe the different actors in the industry. As I have collected data from different sources and different countries, each country could have a different definition of what crowdfunding is. Due to this, some countries could include platforms that are not seen as crowdfunding platforms in other countries resulting in a different number across countries.

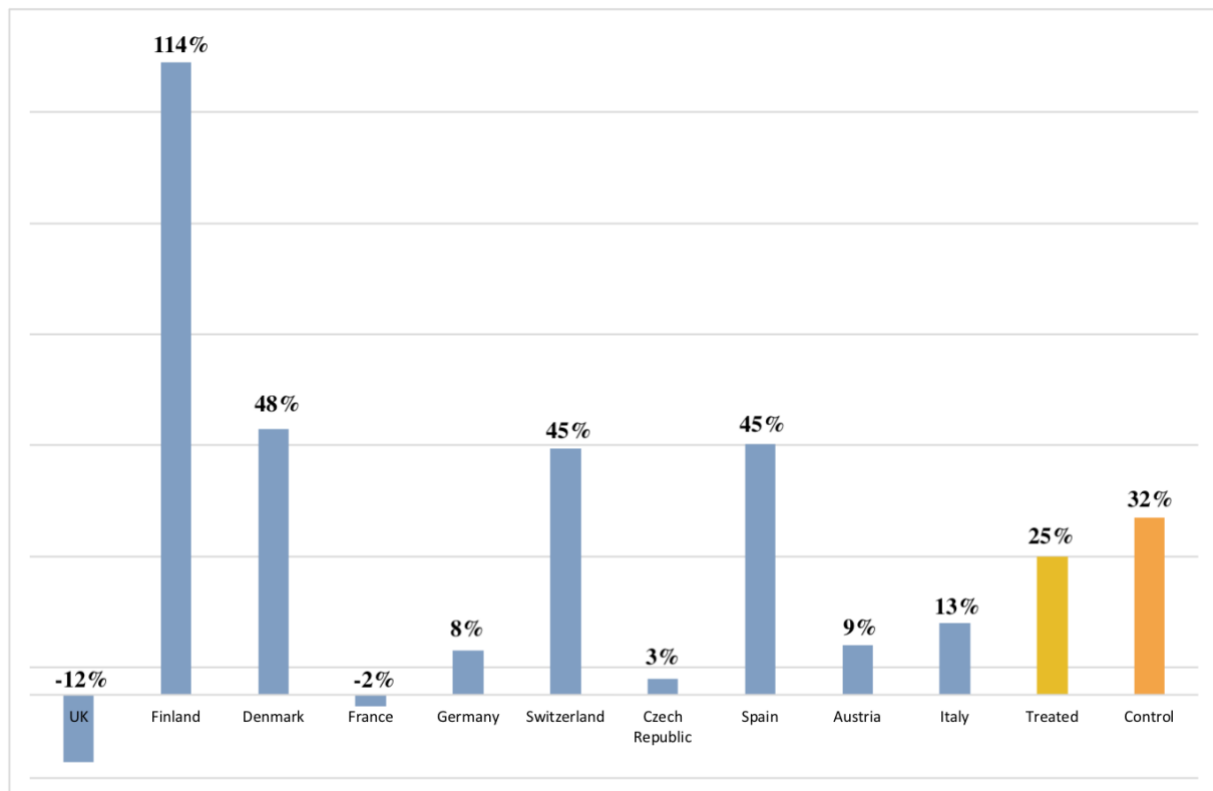
A series of reports published by the Cambridge Centre for Alternative Finance together with academic and industry partners are included to understand the perception of the crowdfunding regulation in the countries. These reports capture the development of alternative finance in Europe and include surveys answered by platforms in the period from October 2014 until September 2017. The first report in the series is “Moving Mainstream” (Wardrop et al.) published in 2015. It received 205 responses from 27 countries in Europe (excluding the UK) in the period from October 2014 to January 2015. From this report, the perception from France,

Germany and Spain is revealed. The second report from 2016, “Sustaining Momentum” (Zhang et al., 2016a) received 273 responses (excluding the UK) in the period from the beginning of May to the end of June 2016. The perception from France, Germany, Spain and Italy is extracted from this report. The third report from 2018, “Expanding Horizons” (Ziegler et al.) received 267 responses (excluding the UK) from June to September 2017. In this report, the perception for all the countries, except the UK, is obtained. Lastly, the report for UK respondents, “Pushing Boundaries” (Zhang et al., 2016b), received 96 respondents from platforms for two weeks in January 2016. The online alternative finance platforms answering these surveys express their opinion regarding the current regulation and the proposed regulation by answer if it is excessive and too strict or adequate/appropriate for the crowdfunding activity. This information is interpreted in the following way. If the platforms indicate the crowdfunding regulation as negative (excessive and too strict), this is interpreted as the regulation is a barrier for the crowdfunding industry. If the platforms indicate the regulation as positive (adequate or appropriate), this is interpreted as the barriers are reduced, or there is no barrier to enter the market. Whenever there is mentioned a survey later on in the text, it refers to one of the surveys mentioned in this paragraph.

Results

In this chapter, the results are presented, divided into two parts. The first part focuses on the average growth between the treated and the control group. While in the last part, each country in the treated group is analysed in more details. The beginning of each country presentation introduces the main changes in the legal framework. This is by no means a complete summary of all the development happened, but it gives a picture of how the legal framework changed after introducing the crowdfunding regulation.

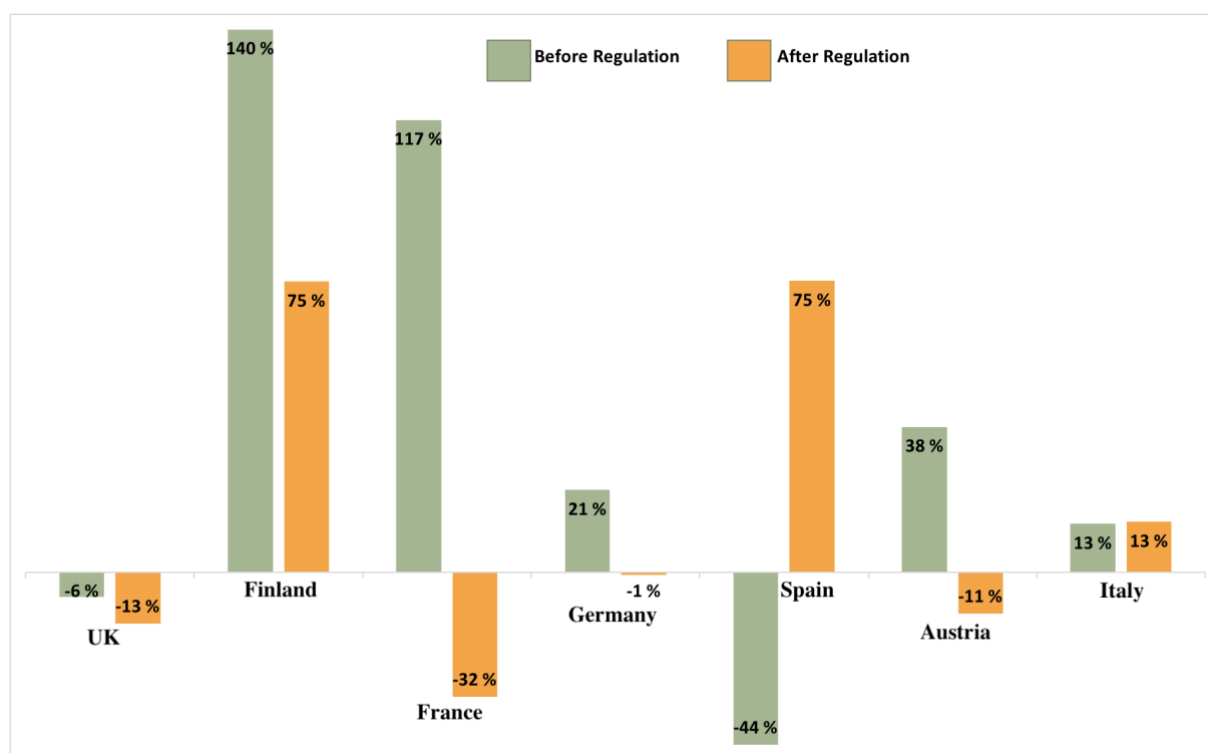
Graph 1 - Average Growth, 2013-2017



Sources: TAB, Crowdfunding.de, FIN-FSA, Crowdfunding 4 Innovation, González and Ramos (2017), Dietrich and Amrein (2018), Dansk Crowdfunding Forening (2017) (2018), Università Cattolica del Sacro Cuore (2015), South Bohemian Agency for Support to Innovative Enterprising (2017), ConPlusUltra GmbH and Agency for European Integration and Economic Development (2017) European Commission (2015)

The graph above represents the average growth for each country throughout the period arranged by the market volume per capita in 2016 (Ziegler et al., 2018) starting with the highest country to the left. As indicated from the graph, the two groups do not stand out in any particular way. The countries in the control group face a positive growth rate similar to the majority of the countries in the treated group. Furthermore, both smaller and larger countries in respect of market volume per capita in both groups experience a positive growth rate. The only notable difference is the treated group which has two countries with a negative growth rate in the opposite of the control group who only has positive growth. As there is no much difference between the treated and the control group this signals that regulation has not had a significant effect on the establishment of new platforms.

Graph 2 - Average Growth Rate Before and After Regulation, 2013-2017



Sources: TAB, Crowdfunding.de, FIN-FSA, Crowdfunding 4 Innovation, González and Ramos (2017), Dietrich and Amrein (2018), Dansk Crowdfunding Forening (2017) (2018), Università Cattolica del Sacro Cuore (2015), South Bohemian Agency for Support to Innovative Enterprising (2017), ConPlusUltra GmbH and Agency for European Integration and Economic Development (2017) European Commission (2015)

The above graph illustrates the average growth rates before and after crowdfunding regulation was introduced. This forms the basis to understand how regulation has impacted new crowdfunding creation and will be used in the next section.

United Kingdom

In April 2014, the UK introduced crowdfunding regulation, regulating both investment-based and lending-based models. Previous to the regulation, lending-based crowdfunding was not regulated, making this an attractive alternative to bank loans. Both types now need an authorisation from the Financial Conduct Authority (FCA) to operate. Both investment-based and loan-based platforms are subject to a minimum requirement, where investment-based is

subject to €50,000 and loan-based is subject to whichever is highest between €50,000 or a certain percentage of the loaned amount (European Commission, 2016). FCA also distinguishes between sophisticated and unsophisticated investors, where the non-sophisticated investors cannot invest more than 10% of their net investable assets (European Commission, 2016).

From the surveys conducted at the beginning of 2016, 91% of peer-to-peer lending platforms and 89% of the investment-based models thought current regulation was adequate. This implies a reduction in barriers to entering the market, and an increase in new market players can be expected. Despite this positive view, the UK has seen a negative growth rate throughout the whole period, with an even further decrease after enforcing the regulation. The growth rates and the perception are conflicting and signal that regulation does not influence the creation of new platforms. However, another critical point is the UK market is the biggest in Europe where peer-to-peer lending was founded already in 2004 (Wardrop et al., 2015). With the decrease in new platforms, although the regulation is appropriate, this can indicate the market is saturated and explains why there is not an increase after all.

Finland

In September 2016, the Finnish Crowdfunding Act (CFA) came into force with the objective of clarifying the responsibilities of various authorities in the supervision of crowdfunding, to improve investor protection and to diversify the financial markets (ECN, 2016b). The CFA has succeeded in reducing administrative operating costs and made it simpler to register crowdfunding platforms. Some examples are reducing the minimum capital requirements from €125,000 to €50,000, increased the threshold for publishing a prospectus to €5 million and removed the requirement to join the Investors' Compensation Fund. Even though the CFA improved the conditions for crowdfunding platforms in general, donation platforms still need a money collection permit to operate (ECN, 2017).

After introducing crowdfunding regulation, Finland experienced on average a positive growth even though it was lower than before implementing the regulation. As stated in the survey from 2017, the majority of the platforms are satisfied with the regulation. 100% of the respondents in investment models are satisfied with the regulation implemented while for non-investment based crowdfunding half thinks the existing regulation is adequate and the rest thinks no regulation is needed. From the perception of regulation, legal barriers in the market seem to be reduced, yet there is a decrease in the growth rate. However, as the growth rate increased by 75%, it seems like the regulation has had a positive effect on new platform creation, even though it decreased from the period before regulation. Primarily as the implementation of the crowdfunding regulation was as late as 2016, Finland might see an even stronger positive effect in a longer timeframe than just one year after implementing the regulation.

France

1 of October 2014, France implemented a new national crowdfunding regulation, regulating both investment-based and lending-based crowdfunding. With this regulation, the regulators created two optional but clarifying statues for platforms to register under, IFP (Crowdfunding investment intermediary) for lending-based models and CIP (Crowdfunding investment advisor) for investment-based models (ECN, 2017). There is no minimum capital requirement related to any of those statues, and the prospectus requirement increased from €100,000 to €1 million. There is no restriction to maximum investment amount in investment-based crowdfunding, but in loan-based, an investor can finance up to €1,000 per project (European Commission, 2016). Alternatively, investment-based platforms can register as a PSI (Investment service provider), which is regulated under the MiFID (European Commission, 2017). There is no specific regulation towards donation and reward-based crowdfunding.

Right after implementing the regulation, the platforms were divided in their opinion regarding the regulation. In the survey from 2015, 42% thought existing regulation was adequate, and 33% thought it was extensive. The positive view increased in both the survey from 2016 and 2017, wherein 2017, 80% of equity models thought the current regulation was adequate. With this increasing positive perception, we can presume a legal barrier is softened, making it easier for new platforms to enter the market. At the same time, the growth rate of new platforms entering the market decreased after introducing regulation. Fewer and fewer platforms were established after introducing regulation, while there was only positive growth before the crowdfunding regulation. A decrease is not what to expect from the increasing positive view, which suggests regulation does not impact new entry in the market.

Germany

Entrepreneurs offering securities or investments products in Germany to other investors were subject to a prospectus requirement, where the threshold was €100,000 per project, which had to be approved by the BaFin (German Federal Financial Supervisory Authority) (ECN, 2017). With the national crowdfunding regulation introduced in July 2015, the threshold increased to €2.5 million per project. However, this is only applicable to subordinated and profit-sharing loans, whereas other types of investment still are obligated to register a prospectus for offers exceeding €100,000. This omission led to platforms changing to issuing subordinated loans from other types of equity instruments (Ziegler et al., 2018). Another significant change in the regulation was removing the investment cap for professional investors. The investment cap for retail investors sees to remain at €10,000 provided they comply with the further requirements after exceeding €1,000 (ECN, 2017).

Before implementing crowdfunding regulation, Germany saw a positive growth rate each year, but this changed after implementing the crowdfunding regulation. Right before introducing the

regulation, 58% thought the proposed regulation was too strict. This view changed in a more positive direction in 2016 where 45% thought of the current regulation as appropriate and only 10% felt it was too strict. A year later, this view changed again and became the complete opposite from the view one year earlier. In both financial based- and non-financial based models, over half of the respondents thought the existing regulation was too strict. For debt models, as high as 70% thought the existing regulation was too strict. With the majority seeing the regulation as inappropriate, accompanied by a negative growth rate after implementing the regulation, this points to regulation is a barrier to the development of new platforms.

Spain

Before Spain got its national crowdfunding regulation (LFFE), both investment-based and lending-based crowdfunding were subject to regulation designed for other activities, while donations and rewards models were not (ECN, 2013). In April 2015, “LFFE” was implemented regulating both investment-based and lending-based crowdfunding (ECN, 2017). After the regulation came in place, crowdfunding platforms need to be registered at CNMV (Spanish financial authority) to operate, and there is an obligation to pay either a minimum capital requirement of €60,000, have professional liability insurance or a combination of both (ECN, 2017). CNMV distinguishes between accredited and non-accredited investors (retail investors), where each face different requirements. The prospectus requirement changed as well after the regulation and increased from €1 million to €2 million and even up to €5 million for accredited investors (ECN, 2017).

The survey from 2015 states 53% thought the proposed regulation was going to be extensive and too strict. This decreased to 43% in 2016 and is likely to be connected with the significant change in the first draft of the regulation before the final version was approved (ECN, 2015). Although fewer platform saw the implemented regulation as too strict, only 17% thought of it

as adequate. This negative view continued in 2017, where 56% of equity models thought of regulation as extensive, and only 37% of debt models thought of regulation as adequate. These views illustrate regulation still being a barrier preventing new platforms to enter the industry. Even with the increasingly negative view on the crowdfunding regulation, Spain was the only country in the sample who had an increase in average growth rate after implementing the crowdfunding regulation. This increased growth is not reflecting the increasingly negative view of regulation which implies regulation does not affect the entry of new platforms in the market.

Austria

The crowdfunding market in Austria is the smallest one in the treated group. Austria implemented the national crowdfunding regulation (AltFG) in September 2015, with the objective of simplifying crowdfunding and provide clear rules on the conditions for financing projects by crowdfunding and for operating a crowdfunding platform. Before implementing the AltFG, a barrier for crowdfunding was the threshold for each project at €250,000 before the prospectus requirement applied. The threshold increased to €5 million with the new regulation, where only light and cheaper prospectus are required if investment volume is between €1.5 and €5 million (European Commission, 2016).

The only survey available for Austria was in 2017, two years after the new regulation, but there have not been new changes in the meantime. All of the respondents in both investment models and non-investment models thought the existing national regulation was adequate and appropriate, indicating a reduction in barriers to enter the market. Nevertheless, Austria saw, unexpectedly, on average a negative growth rate in the years after implementing the regulation. As a result, these finding does not suggest regulation has an impact on new platform creation.

Italy

Italy was the first country in Europe to introduce specific regulation towards equity

crowdfunding, introducing it already at the end of June 2013. Lending-based, reward and donation models are not regulated under the crowdfunding regulation, but they are subject to the existing framework which is assessed case by case (ECN, 2013). For equity platforms to operate in Italy, they are required to get a licence from CONSOB, the Italian regulator of financial markets. When the regulation first came in place, only innovative start-ups were allowed to raise money through equity platforms. This article in the law was later changed several times. The first change was allowing all innovative SMEs to raise money this way. Secondly, it opened up for investment funds and the latest change, approved in November 2016, allowed all Italian SMEs to collect equity capital (ECN, 2016a). The threshold for registering a prospectus is now increased to €5 million. The regulators have as well determined as a protection of the investor the fundraiser is forced to collect at least 5% of the capital offered by a qualified investor (a professional investor).

The earliest survey conducted in Italy was in 2016, three years after implementing the regulation. At that time, 37% thought existing regulation was adequate, 20% thought it was too strict, and 17% indicated the need for regulation. This is after the amendment allowing all innovative SMEs and investment funds to raise funds through equity platforms, not just innovative start-ups anymore. This is a positive change towards a less restricted market, which makes it probable to assume that before the amendment, platforms were less confident towards the current regulation in 2013. From the survey conducted again in 2017, the majority expresses that the regulation was too strict. 60% of equity models and 43% of debt models thought of regulation as excessive, while only 14% of debt models thought it was adequate. Italy did not see any change in growth rates after implementing the regulation, as they continued to have the same growth as before. This is not unexpected as the opinion regarding regulation in 2016 was

divided. However, with the increasingly negative view of regulation, a decrease in further growth can be expected at a later stage.

Conclusion and Discussion of findings

The next table provides a summary of the results presented in the previous chapter.

Table 1 – Summary of the result

	Perception	Positive/negative growth rate
UK	Positive	Negative and decreased
Finland	Positive	Positive, but decreased
France	Positive	Negative and decreased
Germany	Negative	Negative and decreased
Spain	Negative	Positive and increased
Austria	Positive	Negative and decreased
Italy	Negative	Positive, but no change

How has regulation affected the establishment of new crowdfunding platforms? The opinion towards the current crowdfunding regulation is divided. As mentioned previously, the objective of the national regulation is to facilitate the development of crowdfunding by trying to face the local challenges the crowdfunding industry faces in each country. In four of these countries, it seems like the regulators were successful in their mission, where the crowdfunding industry perceives the regulation as positive. However, in the last three countries, the industry perceives the regulation as negative indicating that regulation is a barrier for crowdfunding and an increase in new platforms are not to be expected. From the first graph, there was no much difference between the treated group and the control group. This indicates regulation has not effect the development of new crowdfunding platforms, or at least the effect is not significant enough to be a crucial factor for further entry into the market. However, looking at the actual growth rates after implementing the regulation compared to before, five out of seven countries

experienced a lower average growth rate. This result indicates regulation hurts the establishment of new crowdfunding platforms in the market and points to regulation being a barrier to overcome for new platforms. The exceptions were Italy who faced on average a constant growth and Spain who was the only country who had an increased growth rate after enforcing the regulation. Finland is, as well, a compelling case, facing a decrease in new platforms but still having a positive growth rate of 75%.

Splitting the perception and the growth rates into two different parameters, they provide some indication on how regulation has affected new crowdfunding establishment, but when combining them any trace of a pattern is gone. The countries who have a positive perception of the crowdfunding regulation are all facing a decreasing growth rate after implementing the regulation. The two countries who experience an increase or a constant growth after regulation are both perceiving regulation as negative. The only exceptions where the perception and the growth rate are consistent are Germany and Finland. Germany views the regulation as negative and faces a negative growth, and Finland views the regulation as positive and faces a positive growth even though it is lower than before. With these diverging results, it is difficult to get a clear answer to how regulation is impacting the development of new crowdfunding platforms. Since both the perception of regulation and the actual growth rates do not align in the majority of the countries, it indicates a weak or no relationship between the two parameters. Thus, it is not possible to predict how the market is going to react to the regulation independent of the regulation being positive or negative.

As a closing remark, there are two aspects I want to highlight. First of all, regulation is a costly affair, where the costs need to be weighed against the benefits to be justified. The crowdfunding industry suffers from asymmetrical information which can be exploited by the platforms and result in an insufficient market outcome. Due to this market failure, regulation is justified. Even

though a relationship between the perception of crowdfunding regulation and the actual growth rates was weak or non-existent, the majority of the treated countries still faced a decrease in new platforms entering the market after implementing the regulation. This is a cost carried by the industry and should be accounted for when considering implementing crowdfunding regulation. Lastly, it is important to emphasise that other factors than regulation can impact the establishment of new platforms. An example is the time frame, where regulation can have a lasting effect both before and after the implementation. This could have increased or decreased the growth of new platforms already before implementing the regulation. In the case of Finland, who implemented regulation as recent as 2016, the growth can come at a later stage outside of the timeframe of this study, especially as there was a strong positive growth rate after implementing the regulation.

References

- Ahern, Deirdre M. 2018. "Regulatory Arbitrage in a FinTech World: Devising an Optimal EU Regulatory Response to Crowdlending." European Banking Institute Working Paper Series 24. <http://dx.doi.org/10.2139/ssrn.3163728>
- Akerlof, Georg A. 1970. "The Market for "Lemons": Quality Uncertainty and the Market Mechanism." *The Quarterly Journal of Economics* 84 (3): 488-500.
<http://www.jstor.org/stable/1879431>
- Amel, Dean F., and J. Nellie Liang. 1997. "Determinants of Entry and Profits in Local Banking Markets." *Review of Industrial Organization* 12 (1): 59-78.
<https://fesrvsd.fe.unl.pt:2358/10.1023/A:1007796520286>
- Brealey, Richard, Hatne E. Leland, David H. Pyle. 1977. "Informational Asymmetries, Financial Structure, and Financial Intermediation." *The Journal of Finance* 32 (2).
<https://doi.org/10.1111/j.1540-6261.1977.tb03277.x>
- ConPlusUltra GmbH, Agency for European Integration and Economic Development. 2017. "Regional Market Analysis on Crowdfunding Austria." Accessed 15 November
http://www.interreg-danube.eu/uploads/media/approved_project_output/0001/11/7b343862f29c07e8db3fffb6c457386c5f3701dd.pdf
- Dietrich, Andreas, Simon Amrein. 2018. "Crowdfunding Monitoring Switzerland 2018." Accessed 7 November https://blog.hslu.ch/retailbanking/files/2018/06/CM_E.pdf
- Dansk Crowdfunding Forening. 2017. "Det danske crowdfunding marked anno 2016." Accessed 14 November <http://danskcrowdfundingforening.dk/wp-content/uploads/Crowdfundinganalysen-20161.pdf>
- Dansk Crowdfunding Forening. 2018. "Det danske crowdfunding marked anno 2017." Accessed 14 November
<https://www.vf.dk/~media/files/analyser/andre%20analyser/det%20danske%20crowdfunding%20marked%20anno%202017%2020.pdf>
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *The Quarterly Journal of Economics* 117 (1): 1-37.
<http://fesrvsd.fe.unl.pt:2202/stable/2696481>.
- European Commission. 2015. "Crowdfunding: Mapping EU markets and events study." Accessed 2 November https://ec.europa.eu/info/sites/info/files/crowdfunding-study-30092015_en.pdf

European Commission. 2016. "Crowdfunding in the EU Capital Markets Union." Accessed 3. November. https://ec.europa.eu/info/system/files/crowdfunding-report-03052016_en.pdf

European Commission. 2017. "Identifying market and regulatory obstacles to cross-border development of crowdfunding in the EU." Accessed 5 November. https://ec.europa.eu/info/sites/info/files/171216-crowdfunding-report_en.pdf

European Commission. 2018. "FinTech: Commission takes action for a more competitive and innovative financial market." Accessed 12 December. http://europa.eu/rapid/press-release_IP-18-1403_en.htm

European Crowdfunding Network. 2013. "Review of Crowdfunding Regulation 2013." Accessed 2 November. <https://eurocrowd.org/wp-content/blogs.dir/sites/85/2016/12/ECN-Review-of-Crowdfunding-Regulation-2013.pdf>

European Crowdfunding Network. 2015. "Spain Government Gives Green Light to Improved Crowdfunding Rules." Accessed 12 November. <https://eurocrowd.org/2015/05/08/spain-government-gives-green-light-to-improved-crowdfunding-rules/>

European Crowdfunding Network. 2016a. "Italy opens up equity crowdfunding to all kinds of SMEs." Accessed 22 November. <https://eurocrowd.org/2016/12/13/italy-opens-equity-crowdfunding-kind-smes/>

European Crowdfunding Network. 2016b. "Finnish Crowdfunding Act – Ministry of Finance provides answers." Accessed 12 November. <https://eurocrowd.org/2016/04/12/finnish-crowdfunding-act-ministry-finance-provides-answers/>

European Crowdfunding Network. 2017. "Review of Crowdfunding Regulation 2017." Accessed 3. October. https://eurocrowd.org/wp-content/blogs.dir/sites/85/2017/10/ECN_Review_of_Crowdfunding_Regulation_2017.pdf

González, Ángel, Javier Ramos. 2017. «Financiación Participativa (Crowdfunding) en España. Informe Anual 2017." Accessed 6 November. https://www.universocrowdfunding.com/wp-content/uploads/UC_Informe-anual-del-Crowdfunding-ES-2017_v180615_JFDK-2JI2-12OFD-KSA2P.pdf

Llewellyn, David. 1999. "The Economic Rationale for Financial Regulation." FSA Occasional Paper 1. http://finra.complinet.com/net_file_store/new_rulebooks/f/s/FSA_Occasional_Paper1_Economic_Rationale_for_Regulation_99.pdf

Magnuson, William J. 2017. "Regulating Fintech." Vanderbilt Law Review, Forthcoming; Texas A&M University School of Law Studies Research Paper No. 17-55. <https://ssrn.com/abstract=3027525>

van Stel, André, David J. Storey, A. Roy Thurik. 2007. "The Effect of Business Regulation on Nascent and Young Business Entrepreneurship." *Small Business Economics* 28 (2-3): 171-186. <https://doi.org/10.1007/s11187-006-9014-1>

South Bohemian Agency for Support to Innovative Enterprising. 2017. "Regional Market Analysis on Crowdfunding Czech Republic." Accessed 14 November http://www.interreg-danube.eu/uploads/media/approved_project_output/0001/11/505c41386e8cd590b29c6285dde7fc63c9218df0.pdf

Universita Cattolica del Sacro Cuore. 2015. "Il Crowdfunding in Italia Report 2015." Accessed 11 November. https://d3alc7xa4w7z55.cloudfront.net/upload/images/01_2016/160108144117.pdf Interreg-Danub (2017)

Wardrop, Robert, Bryan Zhang, Raghavendra Rau and Mia Gray. 2015. "Moving Mainstream. The European Alternative Finance Benchmarking Report." Accessed 26 November. <https://www.ey.com/publication/vwluassets/ey-and-university-of-cambridge/%24file/ey-cambridge-alternative-finance-report.pdf>

Ziegler, Tania, Rotem Shneor, Kieran Garvey, Karsten Wenzlaff, Nikos Yerole mou, Rui Hao and Bryan Zhang. 2018. "Expanding Horizons. The 3rd European Alternative Finance Industry Report." Accessed 23 October. https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2018-02-ccaf-exp-horizons.pdf

Zhang, Bryan, Robert Wardrop, Tania Ziegler, Alexis Lui, John Burton, Alexander James and Kieran Garvey. 2016a. "Sustaining Momentum. The 2nd European Alternative Finance Industry Report." Accessed 5 November. https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2016-european-alternative-finance-report-sustaining-momentum.pdf

Zhang, Bryan, Peter Baeck, Tania Ziegler, Jonathan Bone and Kieran Garvey. 2016b. "Pushing Boundaries. The 2015 UK Alternative Finance Industry Report." Accessed 26 November. https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2015-uk-alternative-finance-industry-report.pdf